

FILE 'HOME' ENTERED AT 11:48:59 ON 13 APR 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 11:49:15 ON 13 APR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 APR 2005 HIGHEST RN 848391-87-7

DICTIONARY FILE UPDATES: 12 APR 2005 HIGHEST RN 848391-87-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2068

L1 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10627792-a.str

L2 STRUCTURE UPLOADED

=> que L2 AND L1

L3 QUE L2 AND L1

=> d

L3 HAS NO ANSWERS

L1 SCR 2068

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L3 QUE ABB=ON PLU=ON L2 AND L1

```

=>.s 13 sss sam
SAMPLE SEARCH INITIATED 11:49:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -          0 TO ITERATE

100.0% PROCESSED          0 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH  **COMPLETE**
PROJECTED ITERATIONS:      0 TO          0
PROJECTED ANSWERS:         0 TO          0

L4          0 SEA SSS SAM L2 AND L1

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2068

L5    SCREEN CREATED

=>
Uploading C:\Program Files\Stnexp\Queries\10627792-b.str

L6    STRUCTURE UPLOADED

=> que L6 AND L5

L7    QUE L6 AND L5

=> s 17 sss sam
SAMPLE SEARCH INITIATED 11:50:08 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -          0 TO ITERATE

100.0% PROCESSED          0 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH  **COMPLETE**
PROJECTED ITERATIONS:      0 TO          0
PROJECTED ANSWERS:         0 TO          0

L8          0 SEA SSS SAM L6 AND L5

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 963 AND 2068

L9    SCREEN CREATED

=>
Uploading C:\Program Files\Stnexp\Queries\10627792-c.str

L10   STRUCTURE UPLOADED

=> que L10 AND L9

L11   QUE L10 AND L9

=> s 111 sss sam
SAMPLE SEARCH INITIATED 11:50:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -          3 TO ITERATE

```

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
PROJECTED ITERATIONS: 3 TO 163
PROJECTED ANSWERS: 0 TO 0

L12 0 SEA SSS SAM L10 AND L9

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2068

L13 SCREEN CREATED

=>
Uploading C:\Program Files\Stnexp\Queries\10627792-d.str

L14 STRUCTURE UPLOADED

=> que L14 AND L13

L15 QUE L14 AND L13

=> s l15 sss sam
SAMPLE SEARCH INITIATED 11:51:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L16 0 SEA SSS SAM L14 AND L13

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 964 AND 2068

L17 SCREEN CREATED

=>
Uploading C:\Program Files\Stnexp\Queries\10627792-e.str

L18 STRUCTURE UPLOADED

=> que L18 AND L17

L19 QUE L18 AND L17

=> s l19 sss sa,
COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains both search terms created by
structure-building or screen commands and text search terms. L#s
created via the STRUCTURE or SCREEN commands must be searched in the
structures files separately from text terms or profiles. The L#
answer sets from structure searches can be used in crossover searches

and can be combined with text terms.

=> s 119 sss sam
SAMPLE SEARCH INITIATED 11:52:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0. ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L20 0 SEA SSS SAM L18 AND L17

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1006 AND 2068

L21 SCREEN CREATED

=>
Uploading C:\Program Files\Stnexp\Queries\10627792-f.str

L22 STRUCTURE UPLOADED

=> que L22 AND L21

L23 QUE L22 AND L21

=> s 123 sss sam
SAMPLE SEARCH INITIATED 11:53:26 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.06

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L24 0 SEA SSS SAM L22 AND L21

=> FIL HCAPLUS, CAPLUS, USPATFULL
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 3.01 3.22

FILE 'HCAPLUS' ENTERED AT 11:53:39 ON 13 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 11:53:39 ON 13 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 11:53:39 ON 13 APR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 14 or 18 or 112 or 116 or 120 or 124
L25 0 L4 OR L8 OR L12 OR L16 OR L20 OR L24

=>.d his'

(FILE 'HOME' ENTERED AT 11:48:59 ON 13 APR 2005)

FILE 'REGISTRY' ENTERED AT 11:49:15 ON 13 APR 2005

L1 SCREEN 2068
L2 STRUCTURE UPLOADED
L3 QUE L2 AND L1
L4 0 S L3 SSS SAM
L5 SCREEN 2068
L6 STRUCTURE UPLOADED
L7 QUE L6 AND L5
L8 0 S L7 SSS SAM
L9 SCREEN 963 AND 2068
L10 STRUCTURE UPLOADED
L11 QUE L10 AND L9
L12 0 S L11 SSS SAM
L13 SCREEN 2068
L14 STRUCTURE UPLOADED
L15 QUE L14 AND L13
L16 0 S L15 SSS SAM
L17 SCREEN 964 AND 2068
L18 STRUCTURE UPLOADED
L19 QUE L18 AND L17
L20 0 S L19 SSS SAM
L21 SCREEN 1006 AND 2068
L22 STRUCTURE UPLOADED
L23 QUE L22 AND L21
L24 0 S L23 SSS SAM

FILE 'HCAPLUS, CAPLUS, USPATFULL' ENTERED AT 11:53:39 ON 13 APR 2005

L25 0 S L4 OR L8 OR L12 OR L16 OR L20 OR L24

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.30	7.52

FILE 'REGISTRY' ENTERED AT 11:54:14 ON 13 APR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 APR 2005 HIGHEST RN 848391-87-7

DICTIONARY FILE UPDATES: 12 APR 2005 HIGHEST RN 848391-87-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer

to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> s 12

SAMPLE SEARCH INITIATED 11:54:26 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 0 TO 0

L26 0 SEA SSS SAM L2

=> s 16 or 110 or 114 or 118 or 122

SAMPLE SEARCH INITIATED 11:55:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 18 TO ITERATE

100.0% PROCESSED 18 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 106 TO 614
PROJECTED ANSWERS: 0 TO 0

L27 0 SEA SSS SAM L6 OR L10 OR L14 OR L18 OR L22

=> s 127 or 126

L28 0 L27 OR L26

=> FIL HCAPLUS, CAPLUS, USPATFULL
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.86	8.38

FILE 'HCAPLUS' ENTERED AT 11:55:40 ON 13 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

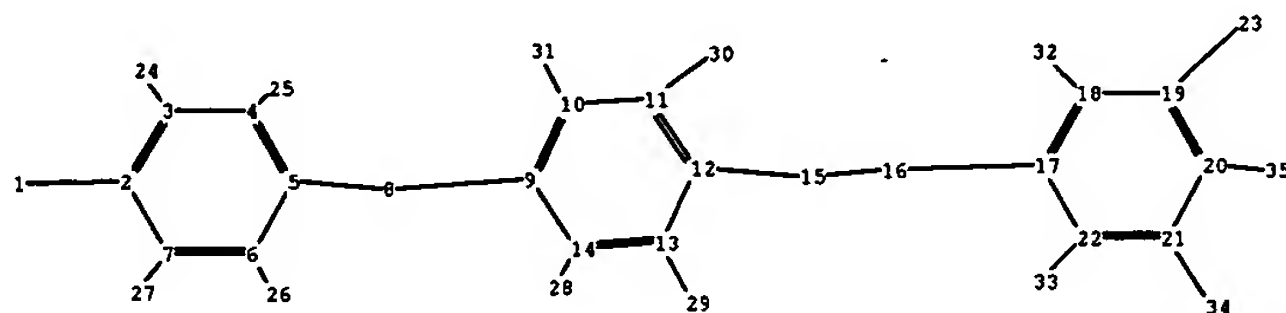
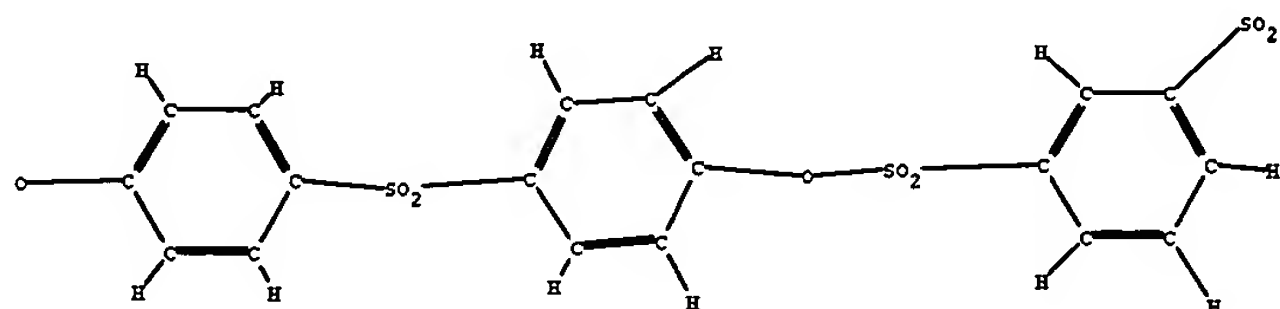
FILE 'CAPLUS' ENTERED AT 11:55:40 ON 13 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 11:55:40 ON 13 APR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 128

L29 0 L28

a



chain nodes :

1 8 15 16 23 24 25 26 27 28 29 30 31 32 33 34 35

ring nodes :

2 3 4 5 6 7 9 10 11 12 13 14 17 18 19 20 21 22

chain bonds :

1-2 3-24 4-25 5-8 6-26 7-27 8-9 10-31 11-30 12-15 13-29 14-28
15-16 16-17 18-32 19-23 20-35 21-34 22-33

ring bonds :

2-3 2-7 3-4 4-5 5-6 6-7 9-10 9-14 10-11 11-12 12-13 13-14 17-18
17-22 18-19 19-20 20-21 21-22

exact/norm bonds :

1-2 12-15 15-16

exact bonds :

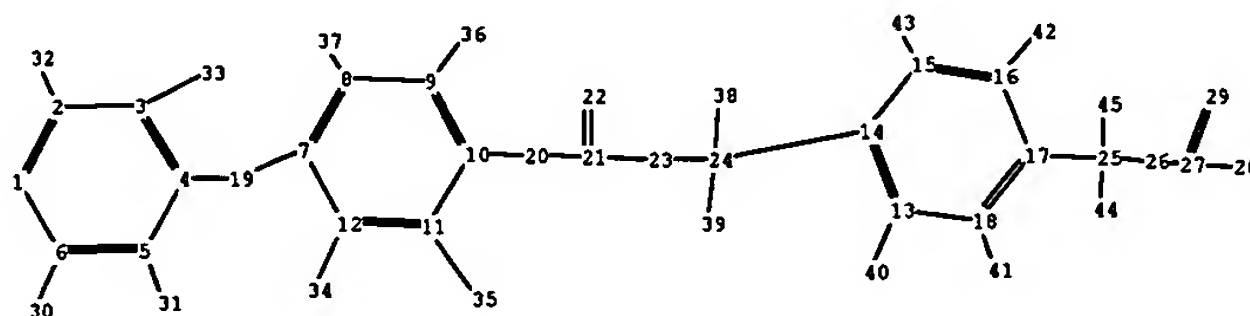
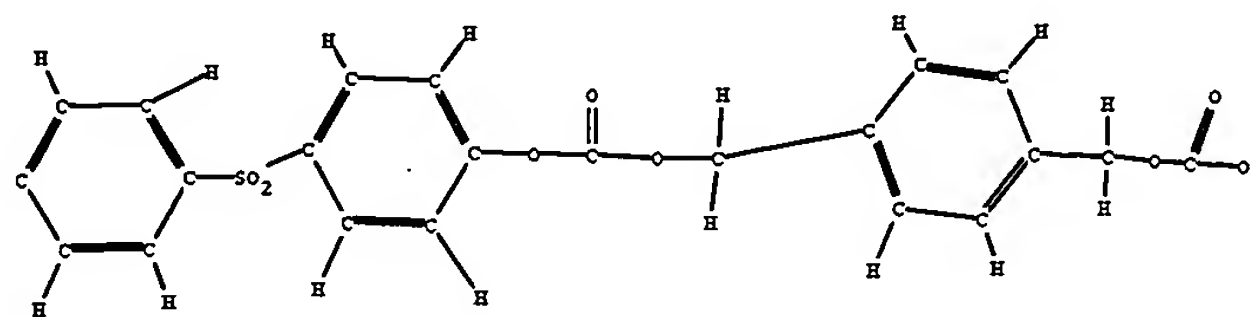
3-24 4-25 5-8 6-26 7-27 8-9 10-31 11-30 13-29 14-28 16-17 18-32
19-23 20-35 21-34 22-33

normalized bonds :

2-3 2-7 3-4 4-5 5-6 6-7 9-10 9-14 10-11 11-12 12-13 13-14 17-18
17-22 18-19 19-20 20-21 21-22

Match level :

1:CLASS 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:Atom
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:Atom
18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:CLASS 24:CLASS 25:CLASS
26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 34:CLASS 35:CLASS



chain nodes :

19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37
38 39 40 41 42 43 44 45

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

2-32 3-33 4-19 5-31 6-30 7-19 8-37 9-36 10-20 11-35 12-34 13-40
14-24 15-43 16-42 17-25 18-41 20-21 21-22 21-23 23-24 24-38 24-39
25-26 25-44 25-45 26-27 27-28 27-29

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14
13-18 14-15 15-16 16-17 17-18

exact/norm bonds :

10-20 20-21 21-22 21-23 23-24 25-26 26-27 27-28 27-29

exact bonds :

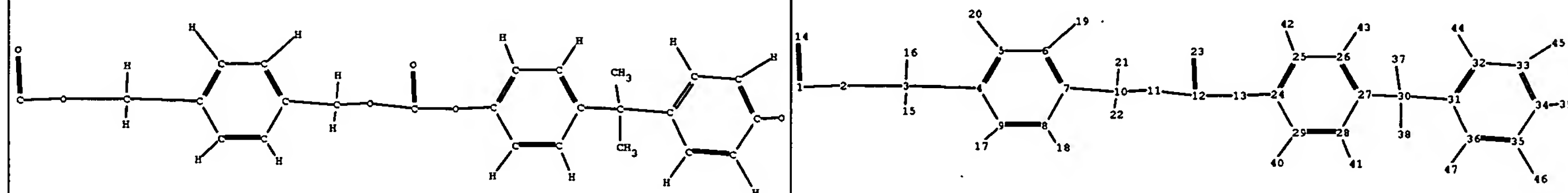
2-32 3-33 4-19 5-31 6-30 7-19 8-37 9-36 11-35 12-34 13-40 14-24
15-43 16-42 17-25 18-41 24-38 24-39 25-44 25-45

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14
13-18 14-15 15-16 16-17 17-18

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom
18:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS
32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS
39:CLASS 40:CLASS 41:CLASS 42:CLASS 43:CLASS 44:CLASS 45:CLASS



chain nodes :

1 2 3 10 11 12 13 14 15 16 17 18 19 20 21 22 23 30 37 38
39 40 41 42 43 44 45 46 47

ring nodes :

4 5 6 7 8 9 24 25 26 27 28 29 31 32 33 34 35 36

chain bonds :

1-2 1-14 2-3 3-4 3-15 3-16 5-20 6-19 7-10 8-18 9-17 10-11 10-21
10-22 11-12 12-13 12-23 13-24 25-42 26-43 27-30 28-41 29-40 30-31
30-37 30-38 32-44 33-45 34-39 35-46 36-47

ring bonds :

4-5 4-9 5-6 6-7 7-8 8-9 24-25 24-29 25-26 26-27 27-28 28-29
31-32 31-36 32-33 33-34 34-35 35-36

exact/norm bonds :

1-2 1-14 2-3 10-11 11-12 12-13 12-23 13-24 34-39

exact bonds :

3-4 3-15 3-16 5-20 6-19 7-10 8-18 9-17 10-21 10-22 25-42 26-43
27-30 28-41 29-40 30-31 30-37 30-38 32-44 33-45 35-46 36-47

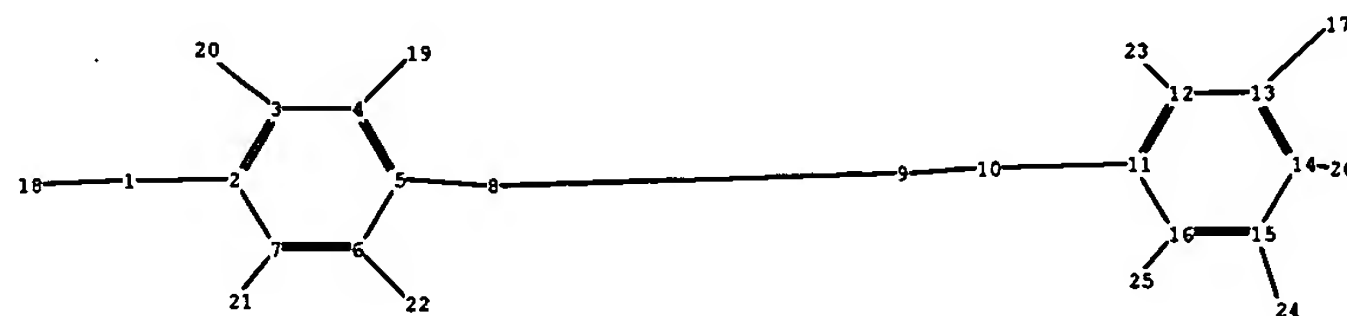
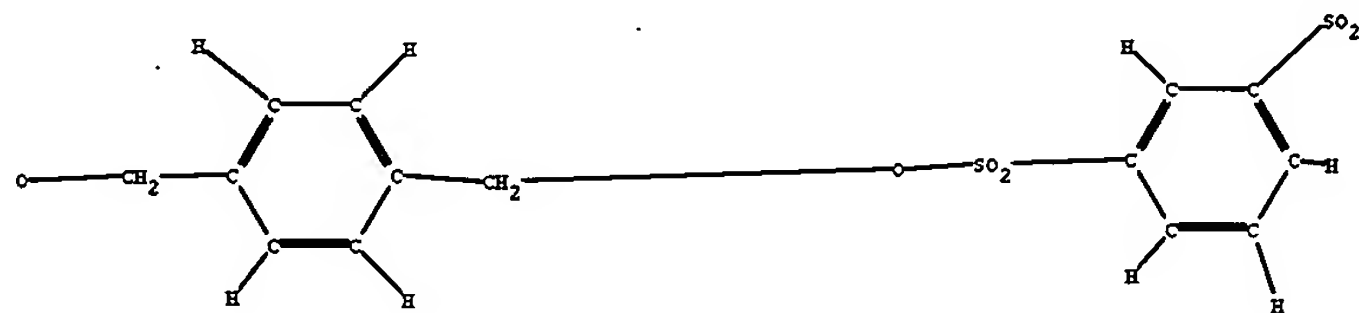
normalized bonds :

4-5 4-9 5-6 6-7 7-8 8-9 24-25 24-29 25-26 26-27 27-28 28-29
31-32 31-36 32-33 33-34 34-35 35-36

Match level :

1:CLASS 2:CLASS 3:CLASS 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS
24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:CLASS 31:Atom
32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:CLASS 38:CLASS 39:CLASS
40:CLASS 41:CLASS 42:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS
47:CLASS

"d"



chain nodes :

1 8 9 10 17 18 19 20 21 22 23 24 25 26

ring nodes :

2 3 4 5 6 7 11 12 13 14 15 16

chain bonds :

1-2 1-18 3-20 4-19 5-8 6-22 7-21 8-9 9-10 10-11 12-23 13-17
14-26 15-24 16-25

ring bonds :

2-3 2-7 3-4 4-5 5-6 6-7 11-12 11-16 12-13 13-14 14-15 15-16

exact/norm bonds :

9-10

exact bonds :

1-2 1-18 3-20 4-19 5-8 6-22 7-21 8-9 10-11 12-23 13-17 14-26
15-24 16-25

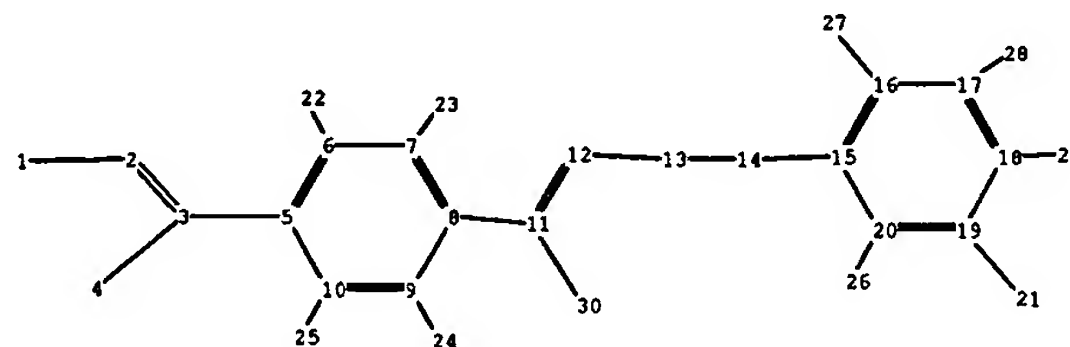
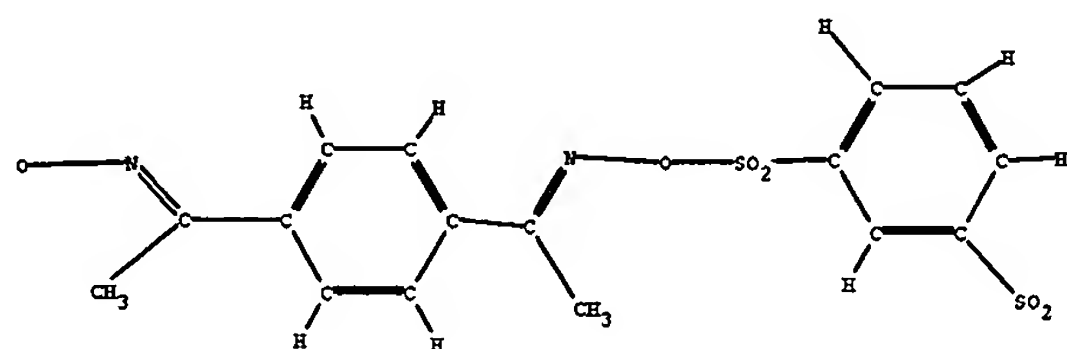
normalized bonds :

2-3 2-7 3-4 4-5 5-6 6-7 11-12 11-16 12-13 13-14 14-15 15-16

Match level :

1:CLASS 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS
10:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS
18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS
25:CLASS 26:CLASS

"e"



chain nodes :

1 2 3 4 11 12 13 14 21 22 23 24 25 26 27 28 29 30

ring nodes :

5 6 7 8 9 10 15 16 17 18 19 20

chain bonds :

1-2 2-3 3-4 3-5 6-22 7-23 8-11 9-24 10-25 11-12 11-30 12-13
13-14 14-15 16-27 17-28 18-29 19-21 20-26

ring bonds :

5-6 5-10 6-7 7-8 8-9 9-10 15-16 15-20 16-17 17-18 18-19 19-20

exact/norm bonds :

1-2 2-3 11-12 12-13 13-14

exact bonds :

3-4 3-5 6-22 7-23 8-11 9-24 10-25 11-30 14-15 16-27 17-28 18-29
19-21 20-26

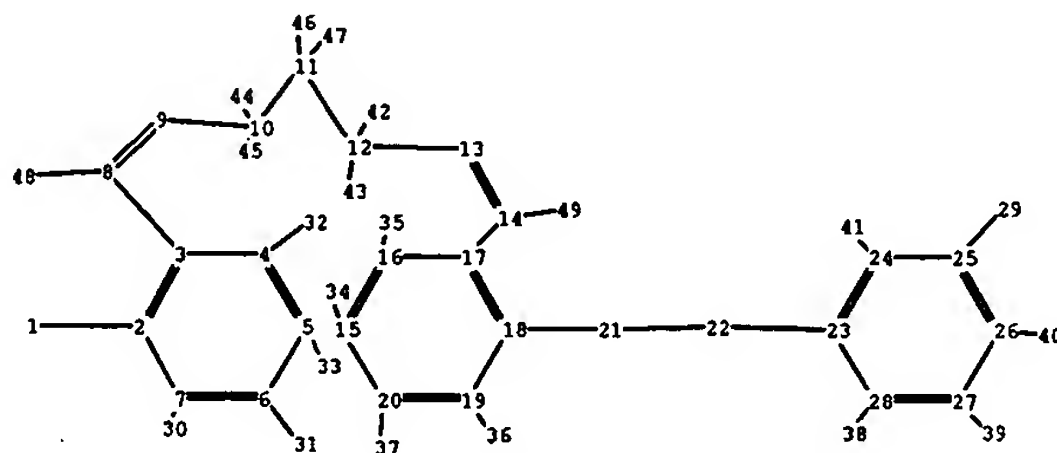
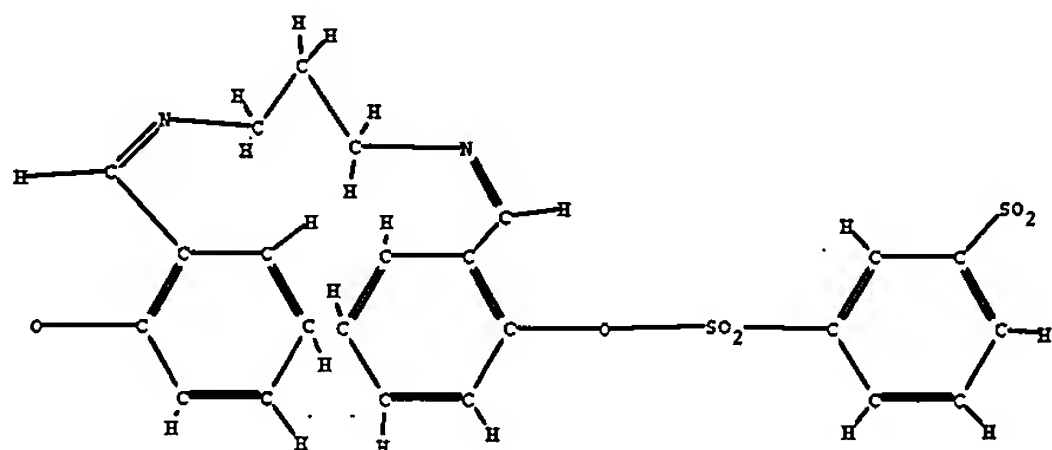
normalized bonds :

5-6 5-10 6-7 7-8 8-9 9-10 15-16 15-20 16-17 17-18 18-19 19-20

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom
18:Atom 19:Atom 20:Atom 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS
26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS

"f"



chain nodes :

1 8 9 10 11 12 13 14 21 22 29 30 31 32 33 34 35 36 37 38
39 40 41 42 43 44 45 46 47 48 49

ring nodes :

2 3 4 5 6 7 15 16 17 18 19 20 23 24 25 26 27 28

chain bonds :

1-2 3-8 4-32 5-33 6-31 7-30 8-9 8-48 9-10 10-11 10-44 10-45
11-12 11-46 11-47 12-13 12-42 12-43 13-14 14-17 14-49 15-34 16-35
18-21 19-36 20-37 21-22 22-23 24-41 25-29 26-40 27-39 28-38

ring bonds :

2-3 2-7 3-4 4-5 5-6 6-7 15-16 15-20 16-17 17-18 18-19 19-20
23-24 23-28 24-25 25-26 26-27 27-28

exact/norm bonds :

1-2 8-9 9-10 12-13 13-14 18-21 21-22

exact bonds :

3-8 4-32 5-33 6-31 7-30 8-48 10-11 10-44 10-45 11-12 11-46 11-47
12-42 12-43 14-17 14-49 15-34 16-35 19-36 20-37 22-23 24-41 25-29
26-40 27-39 28-38

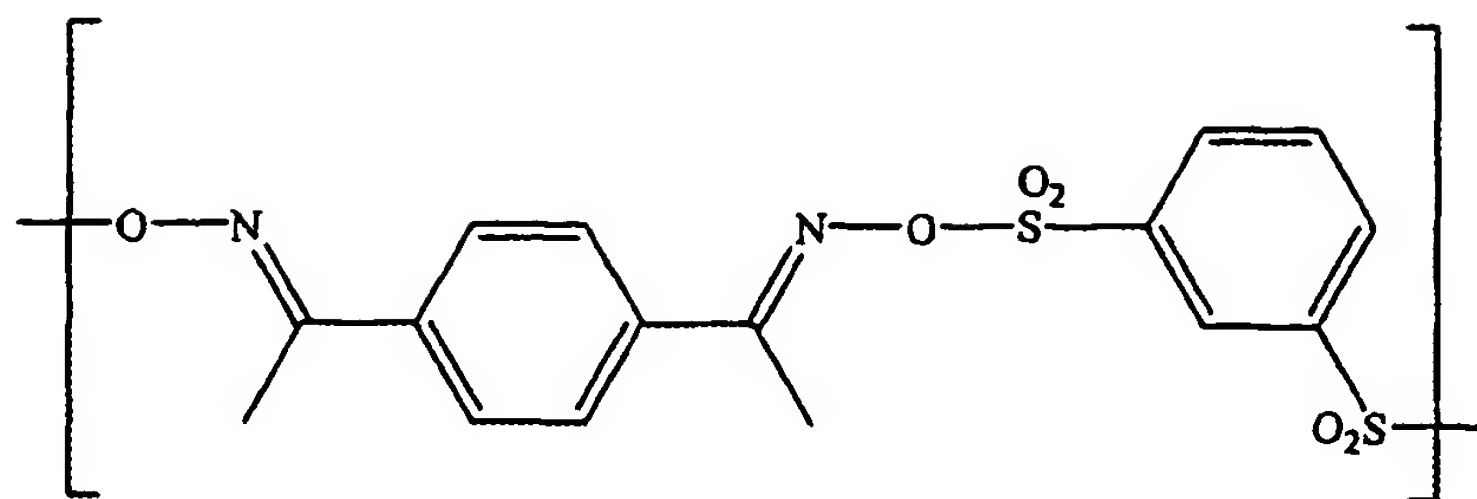
normalized bonds :

2-3 2-7 3-4 4-5 5-6 6-7 15-16 15-20 16-17 17-18 18-19 19-20
23-24 23-28 24-25 25-26 26-27 27-28

Match level :

1:CLASS 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom
18:Atom 19:Atom 20:Atom 21:CLASS 22:CLASS 23:Atom 24:Atom 25:Atom
26:Atom 27:Atom 28:Atom 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS
34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:CLASS
41:CLASS 42:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS 47:CLASS
48:CLASS 49:CLASS

Structure E



10

EXAMPLE 9

Synthesis of Polysulfonylester Imine

In this example, all materials were purchased from TCI and used as received. In a 250 ml, 2-neck, round-bottomed flask, N,N-disalicylal-1,2-propanediamine (3.00 g), 1,3-benzenedisulfonyl chloride (2.92 g), and chloroform (40 ml) were mixed and stirred at room temperature. Triethyl amine (2.95 ml) was added in portions, and the mixture was heated to reflux for 23 hours. The reaction mixture was allowed to cool to room temperature, the solvent was concentrated to about 15 ml, and the polymer was precipitated into methanol (250 ml). The polymer was collected, redissolved in chloroform (15 ml), and precipitated one more time into methanol (200 ml). After drying in a vacuum oven, 3.71 g (72%) of a yellow polymer was collected. The structure of the resulting polymer is shown in Structure F.

15

20

Structure F

